

CHERNUKHIN, S.Ya., kandidat tekhnicheskikh nauk.

Drainage of drying fields for block and milled peat. Trudy Inst.
torf. AN BSSR 4:217-229 '55. (MLRA 9:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut torfyanoy
promyshlennosti.

(Peat)

CHERNUKHIN, S.Ya., kand.tekhn.nauk

Problems involved in winning peat litter by the milling method.
Torf.prom. 37 no.4:19-21 '60. (MIRA 13:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut torfyanoy
promyshlennosti.
(Peat machinery)

VAGANOV, V.V., inzh.; CHERNUKHIN, S.Ya., kand.tekhn.nauk

Winning peat litter at the enterprises of the Leningrad Economic
Council. Torf.prom. 38 no.2:27-31 '61. (MIRA 14:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut torfyanoy promy-
shlennosit.
(Leningrad Economic Region—Peat industry)

VAGANOV, V.V.; CHERNUKHIN, S.Ya., kand. tekhn. nauk

Using the milled peat method for the production of peat
litter in the industrial and state- and collective-farm
enterprises. Trudy VNIITP no.18:92-108 '61. (MIRA 17:1)

CHERNUKHIN, S.Ya., kand. tekhn. nauk; VAGANOV, V.V., inzh.

Technological plan for the manufacture of peat litter. Torf.
prom. 39 no.7:28-30 '62. (MIRA 16:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut torfyanoy
promyshlennosti.

(Peat)

MANDEL'BAUM, Aleksandr Iosifovich, inzh.; ZAKHIDYAPIN, Boris
Mikhaylovich, inzh.; MORGUNOV, Nikolay Ivanovich, kand.
sel'khoz. nauk; CHERNUKHIN, Sholom Yakovlevich, kand.
tekhn. nauk; CHUBAROV, N.D., red.; LARIONOV, G.Ye., tekhn.
red.

[Industrial production of peat-mineral-ammonia fertilizers]
Promyshlennoe proizvodstvo torfomineral'no-ammiachnykh udob-
renii i torfianoi podstilki. [By] A.I.Mandel'baum i dr. Mo-
skva, Gosenergoizdat, 1963. 231 p. (MIRA 17:1)
(Fertilizers and manures) (Peat)

CHEKNUKHIN, V.

Hundreds of volunteer helpers. Sov.profsoluzy 18 no.23:20-22
D '62. (MIRA 15:12)

1. Predsedatel' zavodskogo komiteta Yuzhno-Ural'skogo zavoda
tyazhelogo mashinostroyeniya.
(Ural Mountain region--Medicine, Industrial)
(Ural Mountain region--Machinery industry)

CHERNUKHIN, V.A., inzh.

Investigating the flow of a fluid film caused by its
interaction with a nonstabilized gas flow. Izv.vys.ucheb.
zav.; mashinostr. no.8:149-155 '62. (MIRA 15:12)

1. Moskovskoye vyssheye tekhnicheskoye uchilishche imeni
Baumana.

(Fluid dynamics)

L 57086-65 EWT(1)/EWP(m)/EWA(d)/FCS(k)/EWA(1) Pd-1
ACCESSION NR: AP5012894

UR/0145/65/000/001/0107/0112
532.5

AUTHORS: Chernukhin, V. A. (Candidate of technical sciences)

TITLE: Experimental determination of fluid film thickness and amount of "drop-wise entrainment" occurring under the action of high speed gas flow

SOURCE: IVUZ. Mashinostroyeniye, no. 4, 1965, 107-112

TOPIC TAGS: fluid flow, fluid film, film thickness

ABSTRACT: The fluid film thickness and amount of "drop-wise entrainment" in the air stream of a fluid film subjected to high speed air flow were experimentally investigated. The apparatus consisted of a 600-mm long, 50-mm wide polished steel plate (covered with another plate) with various plug or slit water film supplies in the plate, a wind tunnel permitting variable air speeds of $M = 0.1-1$, and also $M = 2.2$, and normal water flow rate and air speed instrumentation. Film thickness was measured with a special electric contact micrometer with error of 1 micron. Experiments were performed for water flow rates of 0.1-8 gm/sec and air speeds of 50-300 m/sec. "Drop-wise entrainment" was measured by

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L 57086-65

ACCESSION NR: AP5012894

collecting the water in the film and subtracting it from the total flow. Entrainment was observed only at speeds above 100 m/sec, and complete film separation could not be obtained even with $M = 2.2$, the full range of water flow. It was found that the film thickness decreased from 10 micron at 70 m/sec (0.87-1.02 gm/cm sec) to ~ 6 at 130 m/sec and then increased to a maximum of 20 micron (wave crests) at 250 m/sec (22 micron for $M = 2.2$). This is of the same magnitude smaller than during vertical wall flow. The film thickness is smaller than calculated from the equation proposed by Abramson (1952). Entrainment varied from 70% at 300 m/sec. It is concluded that the proposed equation are invalid and should be re-evaluated. (Fig. 1, 2, 3, 4 figures and 2 formulas.

ASSOCIATION: none

SUBMITTED: 03Dec63

ENCL: 00

SUB CODE: ME

NO REF SOV: 003

OTHER: 001

Card 2/2

L 4379-66 EWT(m)/EWA(h)
ACCESSION NR: AP5020258

UR/0367/65/002/001/0092/0096 ^{3/}₂₅

AUTHOR: D'yachenko, F. P.; Kuz'minov, B. D.; Smirnov, V. I.; Chernukhin, V. L.; Chubarov, S. I.

TITLE: Kinetic energies of fragments with various masses in the fission of U-235 by thermal and fast neutrons ¹⁹

SOURCE: Yadernaya fizika, vl. 2, no. 1, 1965, 92-96

TOPIC TAGS: uranium, nuclear fission, fission product, fast neutron, thermal neutron

ABSTRACT: The kinetic energy distributions of fragments with various masses have been investigated in the fission of U^{235} by thermal neutrons and by neutrons of mean energy 720 kev, for the purpose of comparing the dependence of the total fragment kinetic energies on the fragment mass ratios at the two fissioning-neutron energies. The fission was produced in a layer of uranium enriched 90% in U^{235} , deposited on a thin organic film, and the fragment energy was measured with two surface-barrier silicon detectors. The detector signals were analyzed after amplification by a two-dimensional 128 x 128 channel pulse-height analyzer, which sorted the pulse heights and stored all the information obtained during the measurements.

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L 4379-66

ACCESSION NR: AP5020258

The results show that the mean total kinetic energies of the fission fragments have the same value for thermal and fast neutron fission, amounting to 156 ± 2 Mev for fission into two fragments with approximately equal masses. This means that in bombardment of U^{235} by thermal neutrons and neutrons with an average energy of 720 keV, the kinetic energy of the symmetric-fission fragments is approximately 10 Mev lower than for fission by neutrons with energies above 7 Mev. "The authors thank A. I. Sergachev, A. B. Yekator, V. F. Semenov, A. N. Utyuzhnikov, A. N. Agfonov, and V. V. Kalyuzhnyy for help." Orig. art. has: 4 figures.

ASSOCIATION: None

SUBMITTED: 19Jan65

ENCL: 00

SUB CODE: NP

NR REF SOV: 003

OTHER: 004

Card 2/2

L 2552-66 EWT(d)/EED-2/EMP(1) IJP(e) BB/00

ACCESSION NR: AP5021338

58 UR/0120/65/000/004/0094/0100
56 539.1.075

AUTHORS: Yekator, A. B.; Ivchenko, V. Ye.; Htalin, L. A.; Meshkov, N. V.;
Smirnov, V. I.; Chernukhin, V. L.

TITLE: Multidimensional analyzer with preliminary data processing and combined memory

SOURCE: Priory i tekhnika eksperimenta, no. 4, 1965, 94-100

TOPIC TAGS: computer, computer control, computer input device, computer memory, computer storage device, memory core, reactor, nuclear energy, neutron radiation, radiation measurement

ABSTRACT: The functional characteristics of a multidimensional analyzer are described. The analyzer was created for studying energy and angular distribution of slow neutrons; however, it may also be used for other multidimensional measurements with corresponding input devices. The storage unit of the device consists of a memory having ferrite cores and a magnetic tape 6.25 mm wide with four recording channels. The combination of integral and nonintegral memory units allows a flexible memory system both in terms of size and in terms of on-line control during

Card 1/3

L 2552-66

ACCESSION NR: AP5021338

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the conduct of an experiment. Preliminary automatic data processing includes the functions of collection, sorting, certain calculations, and translation for computer input or from printer and oscillograph output. Basic units of the hardware are: a) the input unit, b) core memory, c) magnetic tape memory, and d) the output and data processing unit. All units are built from semiconductor and magnetic elements. The basic core memory has a capacity of 2048 16-bit words and is provided with a speed monitor feature to give a slower recording rate at input loading. Block diagrams are included, showing the flow of information through the composite system during data collection, sorting, transformation, and continuous process control. Particular information on cycle times and recording speeds is given. For neutron tracking experiments, data pass through detection, signal amplification, phasing, and time conversion into machine code. The passage of information from each detector is parallel and independent. Specific information on measurement time interval limitations is given. Functional block diagrams of the input unit, high speed intermediate memory, and magnetic tape recording unit are shown and discussed. Data may be processed prior to output for obtaining the double differential section of neutrons. The formulae used in the calculations are given. The authors thank A. V. Andriashin, B. Ya.

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Cons 2/3

L 2552-66

ACCESSION NR: AP5021338

⁴⁴Gerasimov, and ⁴⁴N. Ye. Detinenko for assisting in the planning and design of the analyzer, and S. I. Chubarov for his interest and assistance. Orig. art. has: 3 figures and 2 formulas. [04]

ASSOCIATION: Fiziko-energeticheskiy institut GKAE, Obninsk (Physics and Power Engineering Institute, GKAE) ⁴⁴

SUBMITTED: 11Jan65

ENCL: 00

SUB CODE: DP, NP

NO REF SOV: 005

OTHER: 000

ATD PRESS: 409

Card ³⁷³

34779-66 EWT(m)

ACC NR: AR6017200

SOURCE CODE: UR/0058/65/000/012/A033/A033

AUTHOR: Andriashin, A. V.; Gerasimov, B. Ya.; Yekator, A. B.; Ivchenko, V. Ye.;
Meshkov, N. V.; Smirnov, V. I.; Chermukhin, V. L.

TITLE: Multidimensional analyzer with preliminary processing of the information and with combined-type memory

SOURCE: Ref. zh. Fizika, Abs. 12A317

REF SOURCE: Tr. 6-y Nauchno-tekhn. konferentsii po yadern. radioelektron. T. 2. M., Atomizdat, 1965, 147-159

TOPIC TAGS: multichannel analyzer, slow neutron, neutron spectrum, angular distribution, ferrite core memory, magnetic recording tape, computer component, *NEUTRON ENERGY DISTRIBUTION*

ABSTRACT: The authors describe a multidimensional analyzer, intended for the investigation of energy and angular distributions of slow neutrons. The recording unit of the analyzer consists of a ferrite-core memory and a magnetic-tape of 6.25 mm width with four-track recording. The combination of integrating and non-integrating memory devices makes it possible to construct a flexible memory system having large capacity as well as permitting the exercise of control over the course of the experiment, preliminary adjustments, preliminary processing of information, etc. The analyzer consists of the following fundamental units, constructed entirely of semiconductor and magnetic elements: a) input unit; b) ferrite-core memory; c) magnetic-tape memory; d) equalizing unit (intermediate ferrite memory); e) unit for insertion and processing

Cord 1/2

L 34779-66

ACC NR: AR6017200

of data. Depending on the chosen operating conditions, the functional connection between the blocks is changed by means of switches. The analyzer is constructed in the form of four individual racks with individual power supplies and control panels. L. S.
[Translation of abstract]

SUB CODE: 20, 09

Card 2/2 ✓

L 44366-66 EWT(m)/EWP(j)/EWP(k)/T/EWP(e)/EWP(t)/ETI LJP(c) RM/WH/WW/JD
ACC NR: AP6019736 (A) SOURCE CODE: UR/0063/66/011/003/0348/0350

AUTHOR: Nosnikov, A. F.; Borodushkina, Kh. N.; Boguslavskiy, D. B.; Chernukhina, A. F.; Khomutov, A. I.; Blokh, G. A.

ORG: Dnepropetrovsk Institute of Chemical Technology im. F. E. Dzerzhinskiy
(Dnepropetrovskiy khimiko-tehnologicheskii institut); Dnepropetrovsk Tire Plant
(Dnepropetrovskiy shinnyy zavod); VNII of Glass Fibers (VNII steklovolokna)

TITLE: Porous silicon fibers acting as carriers of gaseous vulcanizing agents and accelerators

SOURCE: Vses khim obshch. Zh, v. 11, no. 3, 1966, 348-350

TOPIC TAGS: vulcanization, rubber, silicon plastic

ABSTRACT: The effect of porous silicon fibers containing hydrogen sulfide, ammonia, and sulfur dioxide on the physicochemical properties of tire rubbers was investigated. The pore diameters ranged from 2.8 Å to 75 Å. The vulcanization temperature was 143-163°C and the vulcanization duration was 10-80 minutes. The fiber contents in the rubber were as high as 10%. Up to 10 wt %, the incorporation of the silicon fibers affected neither the vulcanization process nor the mechanical properties of the tire rubbers. It was found that rubbers prepared using ammonia accelerator were qualitatively as good as those vulcanized with sulfur compounds and diphenylguanidine ac-

UDC: 666.86+675.5

Card 1/2

L 44366-66

ACC NR: AP6019736

celerator. In all cases, the tire rubbers vulcanized with ammonia exhibited excellent mechanical properties. Orig. art. has: 2 figures, 2 tables.

SUB CODE: 11/

SUBM DATE: 16Jun65/

ORIG REF: 004

Card 2/2 hs

KHODOSOVA, Ye.L.; CHIRNUSHINA, L.A.; SEREBYANYI, S.B.; CHIRNUSHINA, F.I.

C-terminal residues of amino acids of fibrinogen and fibrin in
cattle blood. Ukr. khim. zhur. 30 no.9:962-965 '64.

(MIRA 17:10)

1. Institut mikrobiologii AN UkrSSR i Institut khimii AN UkrSSR.

NEPLYUYEV, V.M.; CHERNUKHINA, L.A.; SEREBRYANY, S.B.

Chromatographic separation of the 4-dimethylamino-3,5-dinitro-phenylthiohydantoins of amino acids on paper. Biokhimiia 29
No. 1:51-52 Ja-F '64. (MIRA 18:12)

1. Institut organicheskoy khimii AN UkrSSR, Kiyev. Submitted
March 16, 1963.

CHERNUKHINA, M. P.

"Tyrotoxic Encephalitis," Klin. Med., 26, No. 6, 1948

Psychiatric Clinic, Khabarovsk Med. Inst.

CHERNUKHINA, M. P.

Psychotic forms of tick encephalitis. Nevropat. psikhiat., Moskva
19 no.4:78-79 July-Aug. 1950. (CIML 20:1)

1. Of the Psychiatric Clinic (Director -- Prof. I. B. Galant),
Khabarovsk Medical Institute, Khabarovsk.

CHERNUKHINA, M. P.

Chernukhina, M. P.

"The Use of Sleep to Treat Schizophrenia." Khabarovsk State Medical Inst.
Chair of Psychiatry. Khabarovsk, 1954. (Dissertation for the Degree of
Candidate in Medical Science)

So: Knizhnaya letopis', No. 27, 2 July 1955

GALANT, I.B.; CHERNUKHINA, M.P.; DENIS'YEVA, O.A.

Mental changes and psychoses in influenza in Khabarovsk during
the period of the 1957 pandemic. Trudy Khab.med.inst. no.20:171-
176 '60. (MIRA 15:10)

1. Iz kliniki psikhiiatrii (zav. prof. I.B.Galant) Khabarovskogo
meditsinskogo instituta.
(Khabarovsk---INFLUENZA) (PSYCHOSES)

GALANT, I.B., prof.; CHERNUKHINA, M.P., kand.med.nauk; DENIS'YEVA, O.A.

Psychoses of influenzal etiology. Vrach. delo no.4:132-133 Ap '61.
(MIRA 14:6)

1. Psikhiatricheskaya klinika (zav. - prof. I.B.Galant) Khabarov-
skogo meditsinskogo instituta.
(MENTAL ILLNESS) (INFLUENZA)

KHOLYAVENKO, K.M.; RUBANIK, M.Ya.; CHERNUKHINA, N.A.

Chemisorption method used for determining the surface area of silver deposited on a carrier. Kin. i kat. 5 no.3:505-512 My-Je '64. (MIRA 17:11)

1. Institut fizicheskoy khimii imeni Pisarzhevskogo AN UkrSSR.

CHERNUKHINA, S. Ye.

DRABKINA, E.M., inzhener; ~~CHERNUKHINA, S. Ye.~~, inzhener.

At the Batrak slope. Put' 1 put.khoz.no.8:38-40 Ag '57.
(MLRA 10:9)
(Railroads engineering) (Landslides)

SIROKO, I.A., mayor meditsinskoy sluzhby, kand. med. nauk; SHANTARENKO, I.V.,
podpolkovnik meditsinskoy sluzhby; MOROZOV, K.A., podpolkovnik medit-
sinskoy sluzhby; CHERNUKHINA, V.F., mayor meditsinskoy sluzhby;
KODES, A.M.

Improvement in the method for the isolation and identification of
dysentery bacteria. Voen.-med. zhur. no.5:61-64 My '60.
(MIRA 13:7)

(SHIGELLA PARADYSENTERIAE)

53300

2209 only

23486
S/152/61/000/005/001/002
B126/B219

AUTHORS: Paushkin, Ya. M., Vishnyakova, T. P., and Chernukhina, V. G.

TITLE: Catalytic reforming of naphthenic hydrocarbons to aromatic hydrocarbons from benzine fractions using a catalyst with 0.1 - 0.3% nickel

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Neft' i gaz, no. 5, 1961, 69 - 73

TEXT: For petrochemical synthesis the problem of aromatic hydrocarbons obtaining from crude oil is of current importance. The dehydrating effect of nickel catalysts has already been carefully examined by A. D. Zelinskiy and his school. Ciapetta (Ref. 2, Ciapetta F., Hanter I., Ind. Eng. Chem., 45, 147, 1953) showed that isomerization of normal pentane, hexane, heptane, and octane to isoparaffins is possible with a catalyst containing 5% of nickel on aluminum silicate and at 407°C, 25 atm pressure; (yield 55 - 65%). Kh. M. Minayev, N. I. Shuykin, L. M. Feofanova and Yu. P. Yegorov isomerized normal decane and hendecane with a catalyst containing 8% of nickel on aluminum oxide. The authors
Card 1/6

Catalytic reforming of...

23486
S/152/61/000/005/001/002
B126/B219

of the present paper experimented with nickel catalysts containing 0.1 - 0.3% of nickel on aluminum oxide. The catalyst was prepared from the active form of aluminum oxide, obtained by calcining ordinary aluminum oxide at 700°C, whereupon the γ -form Al_2O_3 is achieved. The aluminum oxide obtained was soaked with a nickel nitrate solution of $Ni(NO_3)_2 \cdot 6H_2O$ in such quantities as to obtain the necessary concentration of metallic nickel on Al_2O_3 after evaporation. The best experimental results were obtained with catalysts containing 0.1 to 0.3% of nickel. They are given in Tables 3 and 4. A catalyst with 0.1 - 0.3% of Ni on Al_2O_3 works without any noticeable decrease in activity for 10 - 12 hr at a volume rate of 0.2 hr^{-1} , then the activity drops as a result of coking. Regeneration was effected by burning the coke at 400 - 500°C. In Table 5, a comparison between reforming by nickel and reforming by platinum is given. The experiments thus proved that a catalyst on a nickel basis only differs slightly in its activity from a catalyst on Pt-basis, but it is much cheaper. There are 5 tables and 3 references: 2 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: Ciapetta F., Hanter I., Ind. Eng. Chem., 45, 147, 1953.

Card 2/6

Catalytic reforming of...

23486
S/152/61/000/005/001/002
B126/B219

ASSOCIATION: Moskovskiy institut neftekhimicheskoy i gazovoy
promyshlennosti im. akad. I. M. Gubkina (Moscow Institute of
Petrochemical and Gas Industry imeni Acad. I. M. Gubkin)

SUBMITTED: February 26, 1961

1) Показатели	2) Температура опыта, °C			3) 0,1% Ni на Al_2O_3 при 550°
	450	500	550	
4) Плотность D_4^{20}	0,7360	0,751	0,768	0,782
5) Молекулярный вес	110,5	118	128	139
6) Броминое число	5,5	10,5	13	10,2
7) Групповой состав, % вес:				
8) ароматические углеводороды	6,1	13,3	21,5	31,1
9) нафтеновые	—	36,7	30	20,2
10) парафиновые	—	42,3	38	39,8
11) непредельные	3,9	7,7	10,5	8,9
12) Состав газа (% объема)				
13) водород	58	73	66,7	70—80
14) непредельные	3,3	7,5	8,8	—

Card 3/6

Table 3

CHERNUKHO, V.L.

Active modification of the complement fixation reaction with the
fresh blood of the patient for the diagnosis of scleroma.
Zhur. ush. nos. i gorl. bol. 23 no.6:82-85 N-D '63.

(MIRA 17:5)

1. Iz kliniki bolezney ukha, gorla i nosa (zaveduyushchiy -
prof. N.P. Kniga) Minskogo meditsinskogo instituta.

COUNTRY : USSR
 CATEGORY : Cultivated Plants. M
 Potatoes; Vegetables. Cucurbits.
 ABS. JOUR. : IzvBiol., No. 3, 1959, No. 10970
 AUTHOR : Charnukhov, A. M.
 INST. : Voronezh Agricultural Institute
 TITLE : The Irrigation Schedule and the Characteristics of the
 Irrigation Technique for Tomatoes Under the Conditions
 of Voronezh Oblast'.
 ORIG. PUB. : Zap. Voronezhsk. s.-kh. in-ta, 1957, 27, No. 2, 121-128.
 ABSTRACT : At the training farm of the Institute experiments were
 conducted in the study of the irrigation schedule for to-
 matoes on heavily clayey chernozem 0.9-1.1 meters in
 thickness. Under the conditions of Voronezh Oblast, the
 lack of uniformity in the distribution of precipitation
 makes it impossible to determine the periods of water
 applications according to the developmental stages of the
 plants. It is necessary to determine the irrigation
 schedule by means of observations on the soil moisture
 for which purpose the author has perfected the design

CARD: 1/2

COUNTRY :
CATEGORY :
ABS. JOUR. : RZhBiol., No. 1959, No. 10970
AUTHOR :
INST. :
TITLE :
ORIG. PUB. :
ABSTRACT : of Shishkov's soil moisture gauge. The study of the water and physical properties of the soil showed that the minimum rates for surface irrigation along the furrows should not be below 500-600 cubic meters per 1 hectare in one application. The depth of the soaking which depends on the spread of the roots system, is 30 cm in June, 40-50 cm in July, and 60 cm in August. In the presence of air dryness, it is necessary to do sprinkling in order to avoid the drop of the flowers and fruit sets.
— N. Ya. Gal'per
CARD: 2/2

CHERNULICH, A.

Category : USSR/General Problems - Problems of Teaching

A-3

Abs Jour : Ref Zhur - Fizika, No 2, 1957, No 2786

Author : Chernulich, A.

Title : Laboratory Work in Physics in the VI-VIII Classes of Secondary School, with Equipment Constructed by the Students.

Orig Pub : Sovetskaya shkola, 1956, No 3, 45-52

Abstract : No abstract

Card : 1/1

BREZHNEV, V.I.; CHERNUS, Yu.K.

The effect of deep underwater sewage disposal on the pollution
of littoral waters in the area of the Sochi health resort.
Gig. 1 san. 25 no. 12:95-96 D '60. (MIRA 14:2)

1. Iz upravleniya vodoprovodno-kanalizatsionnogo khozyaystva
Ministerstva kommunal'nogo khozyaystva RSFSR i Sochinskoy
sanitarno-epidemiologicheskoy stantsii.
(SOCHI—WATER—POLLUTION)

CHERNUS, Yu.K., vrach.

Sanitary conditions for disposing of sewage into the sea and
the length of the area over which it spreads. Vod.i san.tekh.
no.4:11-13 Ap '63 (MIRA 16:4)

(Sewage disposal)

~~CHERNUSHENKO, A. M.~~

USSR/ Electronics - Cathode ray tubes

Card 1/1 : Pub. 22 - 22/44

Authors : Stekol'nikov, I. S.; Inkov, A. Ya.; and Chernushenko, A. M.

Title : A new feeding system for a pulse oscillograph

Periodical : Dok. AN SSSR 98/6, 969-972, October 21, 1954

Abstract : A new method for feeding cathode ray tubes of various types is described. The method consists of applying overcharged (with respect to a normal voltage of a tube), a short, almost square wave type, negative pulses to the cathodes of the tubes. The method found a great application in the cathode ray tube industry for it helped to diminish the dimensions, weight, and cost of the tubes. Four Russian references (1944-1953). Diagrams.

Institution: Power Engineering (Energetic) Institute im. G. M. Krzhánovskiy of the Acad. of Scs. of the USSR

Presented by: Academician A. V. Vinter, May 12, 1954

CHERNUSHENKO, A. M.
Category : USSR/Radiophysics - Radio-wave reception

I-7

Abs Jour : Ref Zhur - Fizika, No 1, 1957, No 1952

Author : Chernushenko, A.M.

Title : Oscillograph for Investigation of Superhigh Frequency Oscillations and
Certain Results of its Use for the Study of Pulsed Magnetrons

Orig Pub : Radiotekhn. i elektronika, 1956, 1, No 3, 381-392

Abstract : Description of a cathode-ray tube and oscillograph intended for the
observation of super-high frequency oscillations of pulsed magnetrons in
the 10-cm band. The first experimental results obtained with this oscil-
lograph are described.

Card : 1/1

CHERNUSHENKU, A. M.

В. Г. Дубинский,
А. М. Кочин
Протокол заседания комиссии по вопросам организации работы

А. М. Кочин
Исторический обзор работы комиссии по вопросам организации работы

В. В. Козлов,
Е. А. Козлов,
Г. П. Козлов,
Н. А. Козлов

План работы комиссии по вопросам организации работы

М. С. Сидоров
Исторический обзор работы комиссии по вопросам организации работы

11 июня
(с 10 до 12 часов)

М. В. Фомин
Вопросы разработки методики работы комиссии по вопросам организации работы

А. М. Прозоров

Вопросы методики работы и организации работы комиссии по вопросам организации работы

В. М. Штеин,
В. М. Штеин,
В. А. Штеин

Исторический обзор работы комиссии по вопросам организации работы

А. М. Чернышев

Указания по организации работы комиссии по вопросам организации работы

М. М. Мещеряков,
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Проблемы организации работы комиссии по вопросам организации работы

В. СЕРГЕЕВ ОБЩЕЕ РАБОТНОЕ
Руководитель Г. А. Леонов

9 июня
(с 10 до 12 часов)

report submitted for the Confidential Meeting of the Scientific Technological Society of
Radio Engineering and Electrical Communications in A. S. Popov (VSEK), Moscow,
8-10 June, 1959

AUTHOR: Chernushenko, A.M.

SOV/109-4-6-12/27

TITLE: Application of Delay Systems to the Deflection of the Electron Beam in Oscillographic Tubes (Primeneniye zamedlyayushchikh sistem dlya otkloneniya elektronogo puchka v ostsillograficheskikh trubkakh)

PERIODICAL: Radiotekhnika i elektronika, 1959, Vol 4, Nr 6, pp 995 - 1001 (USSR)

ABSTRACT: First, the problem is considered analytically. It is assumed that the dynamic sensitivity A_ω of the deflection system is given by:

$$A_\omega = A'_\omega \left\{ \sin \omega nh \frac{1 - \frac{v}{v_0}}{2v} \operatorname{cosec} \omega h \frac{1 - \frac{v}{v_0}}{2v} \sin \omega x \right. \\ \times \left[t + \frac{h(n-1) \left(1 - \frac{v}{v_0} \right)}{2v} + \frac{\tau}{2} \right] + \sigma \sin \omega nh \frac{1 + \frac{v}{v_0}}{2v} x \\ \times \operatorname{cosec} \omega h \frac{1 + \frac{v}{v_0}}{2v} \sin \left\{ \omega \left[t - \frac{2nh}{v} + \frac{h(n-1) \left(1 + \frac{v}{v_0} \right)}{2v} + \frac{\tau}{2} \right] + \varphi \right\} \right\} \quad (1)$$

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Application of Delay Systems to the Deflection of the Electron
Beam in Oscillographic Tubes

where A'_ω is the dynamic sensitivity of a single deflection element, $A_o = kU_m h / 2dU_o$ is the static sensitivity of one deflection element, ω is the angular frequency, n is the number of the deflection elements, v is the phase velocity of a wave propagating along the system, σ is the modulus of the reflection coefficient, φ is the phase of the reflection coefficient, U_m is the amplitude of the deflection voltage, v_o is the velocity of the beam in the deflection region, h is the period of the system, d is the distance between the deflection surfaces, U_o is the accelerating voltage which determines the velocity of the beam in the accelerating region and k is the field form factor. Eq (1) is used to plot some curves; these are shown in Figures 1 and 2. Figure 1 illustrates the dependence of the dynamic sensitivity of the deflection system on the

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. Application of Delay Systems to the Deflection of the Electron Beam in Oscillographic Tubes

mismatch of the beam and wave velocities. Figure 2 shows the dynamic sensitivity of the deflection system as a function of frequency for various values of the reflection coefficient. The experimental investigation was carried out on two tubes. The deflection of one of the tubes was in the form of a tape line situated inside a rectangular screen (Figure 3). The electrical characteristics of this system were: wave impedance of 60Ω , delay factor of 5, standing wave ratio of 1.7 over the frequencies ranging from 0 - 15 000 Mc/s. The second tube had the delay system of a "helix-in-a-waveguide" type (Figure 4). The system had the following parameters: wave impedance of 100Ω , delay of 5, standing wave ratio of less than 2 over the frequencies of 0 - 10 000 Mc/s. The electron gun of the tubes had an electrostatic focusing. From the experiments it was found that the tube with a helical deflection system had a bandwidth extending from 0 - 10 000 Mc/s (see Curve B in Figure 6); the dynamic

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Application of Delay Systems to the Deflection of the Electron Beam in Oscillographic Tubes

sensitivity of the tube was 2.2 lines per 1 V. The tube with the tape-line deflection system had a bandwidth of 15 000 Mc/s (see Curve A in Figure 6). The dynamic sensitivity of this tube was 1.25 lines per 1 V; the power required to deflect the beam by the width of one line was 11 mW. The oscillograms taken by means of the tubes are shown in Figures 7 and 8. Figure 7 shows a video pulse whose rise time was 2 mμsec; Figure 8 illustrates the front of the pulse of a magnetron operating at 10 000 Mc/s. The author expresses his gratitude to R.L. Golub for carrying out the technological work in the construction of the tubes. There are 8 figures and 7 references, 4 of which are English and 3 Soviet.

SUBMITTED: April 16, 1957
After revision - July 11, 1958

Card 4/4

Chernushenko, F.

CHERNUSHENKO, F.

Rhythmical work in enterprises is the important condition for increasing labor productivity. Avt.transp.33 no.8:10-11 Ag'55.

(MLRA 8:12)

1. Glavnyy inzhener 1-go Kiyevskogo avtoremontnogo zavoda
(Automobiles--Repairing)

CHERNUSHENKO, Ye. F., Cand Med Sci -- (diss) "Course of immunobiological reactions in tuberculosis under conditions of stimulation of the central nervous system (experimental study¹²²)."
Kiev, 1957. 11 pp (Min of Health Ukr SSR, Kiev Order of Labor Red Banner Med Inst im Academician A. A. Bogomolets), 200 copies (KL, 1-58, 122)

- 107 -

CHERNUSHENKO, Ye.F., nauchnyy sotrudnik

Streptomycin therapy following experimental BCG vaccination
and its influence on the development of immunity. Pat., klin.
i terap.tub. no.8:16-19 '88. (MIRA 13:7)

1. Iz mikrobiologicheskoy laboratorii (rukovoditel' - prof.
R.O. Drabkina) Ukrainского nauchno-issledovatel'skogo instituta
tuberkuleza im. akad. F.G. Yanovskogo.
(STREPTOMYCIN) (BCG VACCINATION) (IMMUNITY)

CHERNUSHENKO, Ye.F., nauchnyy sotrudnik

Streptomycin therapy in experimental primary minimal tuberculosis infection and its influence on the formation of immunity. Pat., klin.i terap.tub. no.8:20-24 '58. (MIRA 13:7)

1. Iz mikrobiologicheskoy laboratorii (rukovoditel' - prof. R.O. Drabkina) Ukrainskogo nauchno-issledovatel'skogo instituta tuberkuleza im. akad. F.G. Yanovskogo.
(STREPTOMYCIN) (TUBERCULOSIS) (IMMUNITY)

IZABOLINSKAYA, R.M., kand.med.nauk.; VEL'TMAN, R.P., nauchnyy sotrudnik;
CHERNUSHENKO, Ye.P., nauchnyy sotrudnik

Changes in the blood protein fractions in guinea pigs under the influence of vaccination and infection with tuberculosis. Pat., klin., i terap. tub. no.8:79-82 '58. (MIRA 13:7)

1. Iz Ukrainskogo nauchno-issledovatel'skogo instituta tuberkuleza im. akad. F.G. Yanovskogo.

(BLOOD PROTEINS) (BCG VACCINATION) (TUBERCULOSIS)

CHERNUSHENKO, Ya.F., nauchnyy sotrudnik

Change in immunologic reactions in patients with pulmonary tuberculosis following surgery. Pat., klin. i terap. tub. no. 8: 339-343 '58. (MIRA 13:7)

1. Iz mikrobiologicheskoy laboratorii (rukovoditel' - prof. R.O. Drabkina) Ukrainskogo nauchno-issledovatel'skogo instituta tuberkuleza im. akad. F.G. Yanovskogo.
(TUBERCULOSIS) (LUNGS--SURGERY)

CHERNUSHENKO, Ye.F., kand.med.nauk

Effect of phthivazide on the development of immunity in BCG vaccination in experiment. Probl.tub. 37 no.7:81-84 '59. (MIRA 13:4)

1. Iz mikrobiologicheskoy laboratorii (zav. - prof. R.O. Drabkina)
Ukrainskogo nauchno-issledovatel'skogo instituta tuberkuleza imeni
akad. F.G. Yanovskogo (direktor - kand.med.nauk A.S. Mamolat).
(BCG VACCINATION exper.)
(ISONIAZID related cpds.)

DRABKINA, R.O., prof.; CHERNUSHENKO, Ye.F., kand.med.nauk

Effect of aptituberculotic drugs on the immunological reactivity of
the body. Vrach. delo no. 3:7-11 Mr '61. (MIRA 14:4)

1. Ukrainskiy nauchno-issledovatel'skiy institut tuberkuleza imeni
akademika F.G. Yanovskogo.
(TUBERCULOSIS) (IMMUNOLOGY)

DRABKINA, R.G., prof.; CHERNUSHENKO, Ye.F., kand.med.nauk

Changes in immunobiological reactions of the body under the influence of streptomycin; experimental study. Probl. tub, 42 no.11:46-51 '64. (MIRA 18:8)

2. Ukrainskiy nauchno-issledovatel'skiy institut tuberkuleza i grudnoy khirurgii imeni akademika F.G.Yanovskogo (direktor - dotsent A.S.Mamolai), Kiev.

DRABKINA, R.O., prof.; CHERNUSHENKO, Ye.F., kand.med.nauk

Effect of para-aminosalicylic acid (PAS) on the reactivity of
the body under experimental conditions. Probl.tub. 39 no.1:
76-82 '61. (MIRA 14:1)

1. Iz Ukrainskogo nauchno-issledovatel'skogo instituta tuberkuleza
(dir. - dotsent A.S. Mamolat).
(SALICYLIC ACID)

GOFNER, A.M., kand.tekhn. nauk; CHERNUSHENKO, Ye.T., inzh.

Powder metal wire for semiautomatic welding in assembly operations.
Svar. proizv. no.8:5-7; Ag '62. (MIRA 15:11)

1. Nauchno-issledovatel'skiy institut po stroitel'stvu
Ministerstva stroitel'stva RSFSR.
(Metal powder products) (Electric welding)

USSR / General and Special Zoology. Insects, Insect
and Mite Pests.

P

Abs Jour: Ref Zhur-Biol., No 12, 1958, 54413.

Author : Chernushkev, P. K.
Inst : Stavropol' Sci. Res. Inst. of Agriculture.
Title : The Oak Prominent (*Phalera bucephaloides*) and
Methods for Its Control (Lepidoptera, Notodontidae).

Orig Pub: Byul. nauchno-tekh. inform. Stavropol. n.-i. in-ta
s. kh., 1956, 1-2, 23-25.

Abstract: *Phalera bucephaloides* is the chief destructive pest
of the oak in the forest belts of the Stavropol'
Scientific Research Institute of Agriculture. The
moths appear in the middle of May and lay eggs (in
groups of 5-100) on the bottom side of the newly
opened leaves. The caterpillars first skeletonize
the bottom side of the leaves, and then eat around

Card 1/2

50

CHERNUSHEVICH, E.I.

Typhoid fever carrier state with localization in a pyelo-
nephrotic kidney. Urologia 28 no.5:49-50 S-0'63

(MIRA 17&4)

1. Iz urologicheskoy kliniki (zav. .. prof. A.I. Mikhel'son)
Belorusskogo instituta usovershenstvovaniya vrachey.

CHERNUSHEVICH, E.I.

Priapism as a complication of the leukemic form of chronic myeloid leukemia. Urologia no.6:58-59 '64.

(MIRA 18:11)

1. Urologicheskaya klinika (zav. - prof. A.I. Mikhel'son)
Belorusskogo instituta usovershenstvovaniya vrachey na baze
Minskoy oblastnoy klinicheskoy bol'nitsy.

89515

5-3630

S/079/61/031/002/008/019
B118/B208

AUTHORS: Petrov, K. A., Neymysheva, A. A., Fomenko, M. G.,
Chernushevich, L. M., and Kuntsevich, A. D.

TITLE: Reaction of N-chloroimides of carboxylic acids with trialkyl-,
halogen-, and cyano phosphites

PERIODICAL: Zhurnal obshchey khimii, v. 31, no. 2, 1961, 516-522

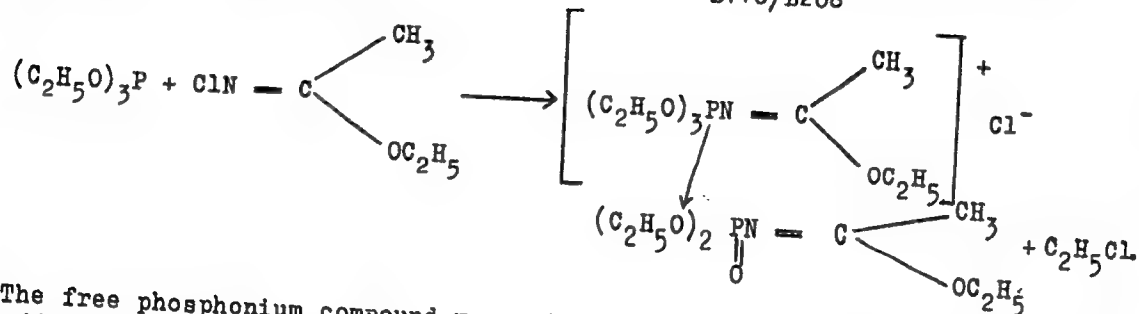
TEXT: The authors studied the reaction of N-chloroimides of esters of acetic
and carboxylic acids with trialkyl-, halogen-, and cyano phosphites. Con-
trary to the vigorously reacting sulfene chlorides, chloroamines, and alkyl
hypochlorites, the reaction of N-chloroethyl acetimide with triethyl
phosphite proceeds smoothly and with little heat evolution. Separation of
ethyl chloride occurs only on prolonged heating at 60-70°C. This reaction
probably takes place in two stages: X

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Reaction of N-chloroimides ...

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S/079/61/031/002/008/019
B118/B208



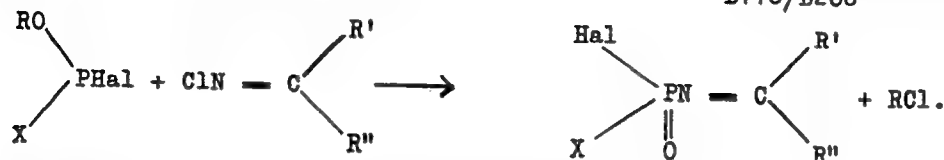
The free phosphonium compound was not obtained.. Chloroimides of carboxylic acid esters react more vigorously with phosphites; main products are the esters of dialkoxy-methylenamide of phosphoric acid. The chloroamides react with dialkyl chloro and dialkyl fluoro phosphites, alkyl dichloro and alkyl di-fluoro phosphites in a similar manner, giving the corresponding halogen amidophosphates in yields of between 27.5 and 70.5%

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Reaction of N-chloroimides ...



Dialkyl fluoro phosphites give with chloroimides rather stable phosphonium compounds. Prolonged heating of the phosphonium compounds reduces the yield of fluoro phosphates; the reaction mixture was, therefore, distilled in vacuum after heating for 1-2 hr at 40-50°C. The fluoro amidophosphates are thermostable and are slowly hydrolyzed with water. When treating difluoro amidophosphates with aqueous alkali lyes at low temperatures, only one fluorine atom is hydrolyzed. On the action of a calculated quantity of sodium alcoholate in the solvent, only one fluorine atom is substituted by the alkoxy radical. Chloro amidophosphates are not thermostable, contrary to fluoro amidophosphates, distill only in high vacuum, and are easily hydrolyzable even at room temperature. When treating chloro amidophosphates with potassium cyanate in water at 5°C, the cyano group is substituted for chlorine, in addition to hydrolysis; in this way, the ethyl ester of

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B118/B208

Reaction of N-chloroimides ...

diethoxy-methylenamide of cyano phosphoric acid results in a 20% yield. By reacting chloroimides with cyano phosphites, cyano amidophosphates are obtained according to Arbuzov's rearrangement (Ref. 2) in yields between 30 and 50%. Dialkoxy-methylenamides of dicyano phosphoric acid are unstable and decompose with separation of gaseous products. There are 1 table and 4 references: 2 Soviet-bloc.

SUBMITTED: February 15, 1960

Card 4/4

CHERNUSHEVICH, M.D.

MOGILEVSKAYA, O.K.; CHERNUSHEVICH, M.D.

Structural changes in the cerebral cortex following experimental disturbance of the visual and auditory functions in dogs of various ages. Trudy Inst. fiziol. AN BSSR 1:238-249 '56 (MLRA 10:5)

1. Laboratoruya morfologii.

(BRAIN--LOCALIZATION OF FUNCTIONS) (SIGHT) (HEARING)

NESMEYANOVA, G.M., CHERNUSHEVICH, N.K.

Behavior of minerals associated with uranium in the process of
the acid leaching of ores. Atom. energ. 9 no.2:137-138 Ag '60.

(MIRA 13:8)

(Uranium ores)

VASIN, F.F. Primal uchastiye ANDREYEV, F.I.; CHERNUSHEVICH, V.A.,
inzh., retsenzent

[Characteristics of the accounting, calculation, and analysis
of the cost of casting] Osobennosti ucheta, kal'kulirovaniia
i analiza sebestoimosti otlivok. Moskva, Izd-vo "Mashino-
stroenie," 1964. 90 p. (MIRA 17:7)

CHERNUSHEVICH, V. A.

"Designing Hot Processing Shops," Avto. i Trak. Prom., No 2, 1948.
Ch. Metallurgist, Peoples' Commissariat Tank Ind. 1943
Stalin Prize (3rd), 1942.

FIL', Ye.V.; ~~CHERNUSHEVICH~~, V.A., inzhener, retsentsent; SILAYEV, A.F.,
kandidat tekhnicheskikh nauk, redaktor; POPOLOV, Ya.N., redaktor;
MATVEYEVA, Ye.N., tekhnicheskii redaktor.

[Organization of foundries] Organizatsiia litynykh tsekhov. Moskva,
Gos. nauchno-tekhn. izd-vo mashinostroitel'noi lit-ry, 1955. 207 p.
(Foundries) (MLRA 9:4)

ROMANOVSKIY, N.T., inzhener; ~~CHERNUSHEVICH, V.A., inzhener.~~

New Chevrolet foundry in Tonawanda, U.S.A. Lit. proizv.
no.8:8-14 Ag '56. (MLRA 9:10)

(United States--Automobiles--Engines)
(Founding)

BLIZNYANSKIY, A.S., inzhener; ~~CHERNUSHEVICH, V.A., inzhener.~~

"Handbook on materials for locomotive and railroad-car construction.
D.A. Veis and others. Reviewed by A.S. Bliznianskii, V.A. Chernu-
shevich. Vest.mash. 36 no.10:85-88 O '56. (MLRA 9:11)

1. Zamestitel' predsedatelya Tekhnicheskogo soveta Ministerstva
transportnogo mashinostroyeniya (for Chernushevich)
(Railroads--Rolling stock--Handbooks, manuals, etc.)
(Veis, D.A.)

ALEKSEYEV, S.A.; ZHMAKIN, D.F.; KEREKESH, V.V.; MALOV, A.N.;
MARTSINOVSKIY, P.I.; MOLOTOK, A.V.; NESMELOV, V.A.;
TEVEROVSKIY, P.A.; KHISIN, R.I.; DELITSIN, A.A., retsenzent;
SOKHNOVSKIY, M.A., retsenzent; STEFANOV, V.P., retsenzent;
STORozHEV, M.V., retsenzent; TALANOV, P.I., retsenzent;
FAL'KEVICH, A.S., retsenzent; CHERNUSHEVICH, V.A., retsenzent;
KHISIN, R.I., red.; GAL'TSOV, A.D., red.; VOL'SKIY, V.S., red.;
STRUZHESTRAKH, Ye.I., red.; SEMENOVA, M.M., red. izd-va; MODEL',
B.I., tekhn. red.

[Manual for the establishment of norms in the machinery industry
in 4 volumes] Spravochnik normirovshchika-mashinostroitelia v
4 tomakh. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-
ry. Vol.3. [Establishing norms for founding, stamping, welding,
painting, metal plating, and woodwork] Normirovanie liteinykh,
kuznechnykh, shtampovochnykh, svarochnykh, lakokrasochnykh ra-
bot, metallopokrytii i derevoobrabotki. 1962. 671 p.
(MIRA 15:4)

(Machinery industry—Production standards)

AUTHOR: Chernushkin, I. T. SOV/72-58-9-12/20

TITLE: Low-Viscosity Glazes on the Basis of Volcanic Ashes (Legko-plavkaya glazur' na osnove vulkanicheskogo pepla)

PERIODICAL: Steklo i keramika, 1958, ¹⁵Nr 9, pp 35 - 37 (USSR)

ABSTRACT: I.M.Gotlib and R.K.Kordonskaya (Ref 1) made an attempt to find low-viscosity glazes, they were, however, not successful. This paper presents an account of the development of a low-viscosity glaze for sewer pipes, tiles and bricks which can be baked at a temperature of 1000-1050°. The basic raw material used was volcanic ash from the site Nal'chik. The alkali content was reduced to a minimum and was partly replaced by zinc oxide, which is contained in the dross from the plant "Elektrotsink". Besides, clay from the site Ordzhonikidze was added. From table 1 the chemical composition of the raw materials can be seen. 14 samples with a content of volcanic ash varying from 20-75%, of dross varying from 20-70% and of clay varying from 5-10% were tested with the purpose of determining the optimum glaze composition. The glazes prepared had a density of 34-36 Bé, they were

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Ordzhonikidze Ceramics Plant

. Low-Viscosity Glazes on the Basis of Volcanic Ashes

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applied by dipping methods and were baked at temperatures from 1100-1200°. Besides, calcinated soda, technical zinc oxide, chalk and pyrolysite were added. The composition of 12 samples is presented in table 2. Next the preparation of the samples is described. They were baked in the electric furnace of the laboratory at 950-980°. The examination of the baked samples showed that those having a dross content exceeding 15 parts by weight exhibited flaws. The best results were obtained with the samples IX and X, which were tested under normal operational conditions in the Ordzhonikidze Ceramics Works. Sewer pipes, tiles and bricks which were glazed with this mixture and which were baked at 1000 to 1050° furnished good results. They complied with the specifications GOST 286-54 for chemical stability. The molecular composition of this glaze is also given. The application of this glaze permits to use local resources of low-viscosity clays in the production of sewer pipes and to reduce their production costs. There are 2 tables and 1 reference, 1 of which is Soviet.

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SOV/110-58-11-12/28

AUTHORS: Zhuravskiy, N.K. (Engineer), and Chernushkin, I.T.
(Engineer).

TITLE: Electrical Porcelain Based on Volcanic Ash. (Elektro-
tekhnicheskij farfor na osnove vulkanicheskogo pepela).

PERIODICAL: Vestnik Elektromyshlennosti, Nr.11, 1958, pp.42-43,
(USSR)

ABSTRACT: It is becoming necessary to find new sources of raw material for the manufacture of electrical porcelain. Experiments have, therefore, been carried out at the Electrical Porcelain Works to make high-voltage electrical porcelain from Nal'chik volcanic ash and Manaas' quartz sand. Chemical analyses of these materials are recorded in Table 1. The formulation adopted for the porcelain is given. The micro-structure of the finished material is described; it has a substantial vitreous phase. Sixteen samples were made up as shown in Table 2, to determine the best composition for the porcelain. The procedures adopted for preparing the mixes, moulding the specimens, and firing them are described. The final firing temperature was 1290-1300°C. The properties of the

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Electrical Porcelain Based on Volcanic Ash.

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three best samples, noted in Table 3, are evidently equal to those of the customary products. It was decided to adopt the wet method of shaping the parts. Insulators were made by pressing. It will be seen that the raw material resources of the industry have been extended and that the firing temperature can be made somewhat lower than hitherto. There are 3 tables.

SUBMITTED: May 7, 1958.

1. Insulation (Electrical)--Physical properties 2. Insulation (Electrical)
--Test methods 3. Volcanic dust--Applications

Card 2/2

15(2)

AUTHORS:

Zhuravskiy, N. K., Chernushkin, I. T., Kapel'ko, A. N.

SOV/72-59-11-11/13

TITLE:

The Use of Volcanic Ash in the Pastes of Electrotechnical Porcelain

PERIODICAL:

Steklo i keramika, 1959, Nr 11, pp 38-41 (USSR)

ABSTRACT:

M. A. Bezborodov, P. F. Mikhalevich, S. G. Tumanov, V. P. Shvayko, G. N. Voronkov, A. A. Zvyagil'skiy, N. F. Kretova carried out experiments aiming at the production of porcelain free from feldspar. The possibility of using volcanic ash was investigated by the GIKI. In the years 1957-58, such experiments were carried out at the Ordzhonikidze Glass Container and Insulator Plant with Nal'chik volcanic ash and Manaasskoye quartz sand. Table 1 gives the chemical compositions of the volcanic ash and quartz sand. Samples with volcanic-ash contents between 25 and 50% were produced. Their compositions are given in table 2, and their average mechanical, thermal, and dielectric values in table 3. Furthermore, the preparation of the porcelain paste is described in detail. It was prepared by means of the vacuum press of type SM-241 and the vacuum grinding machine VP-220. The baking of insulators was carried out in the oil-fired miniature tunnel kiln

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The Use of Volcanic Ash in the Pastes of
Electrotechnical Porcelain

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of the GIEKI system. The figure shows the temperature- and gas conditions of the baking process. The composition of the glazing is given in table 4. The average values of the properties of the insulators obtained, which are considered favorable, are listed in table 5. In conclusion, the authors state that volcanic ash constitutes a strong flux, and simplifies, as well as renders more economical, the technological process of porcelain preparation. The baking temperature for insulators can also be lowered by 50-60°, which extends the life of the tunnel kiln. There are 1 figure and 5 tables.

Card 2/2

S/110/60/000/008/001/008
E194/E455

AUTHORS: Van-Gaut, Yu.N. and Chernushkin, V.Z., Engineers

TITLE: The Temperature-Dependence of the Electric Strength of Polyvinyl Chloride¹ and Polyethylene² Insulation 15

PERIODICAL: Vestnik elektropromyshlennosti, 1960, No.8, pp.9-12

TEXT: This article describes a.c. electric strength tests on various grades of sheet polyvinyl chloride and polyethylene insulation, and also on high-voltage automobile cables with these types of insulation, over the temperature range 20 to 120°C. The samples were made in the Scientific Research Institute of the Cable Industry, who requested the tests. The tests were made on experimental automobile high-voltage ignition cables with insulation of plastic grade R230, polyethylene grade OKhK-510 and English polyethylene grade Alkathene D-2. In all cases the cable cores were 19 x 0.26 mm (1.3 mm diameter), the nominal external diameter of the cables over the insulation being 3, 5 and 7 mm. Cable samples 3 to 5 m long were placed in a heated steel bath filled with a semi-conducting mixture of transformer oil with 10 to 20% dibutylphthalate. The test electrode consisted of a lead tube of the same nominal internal diameter as the outer diameter ✓
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S/110/60/000/008/001/008
E194/E455

The Temperature-Dependence of the Electric Strength of Polyvinyl Chloride and Polyethylene Insulation

of the cable. The ends of the lead tube were flared out to bell-shaped ends and the cylindrical part was protected by an external brass tube, as sketched in Fig.1. After a breakdown test had been made at one place the electrode could be slipped along the cable to make a further test. The sheet materials tested were polyvinyl chloride grades R230, R489 and R2566, Polyethylene grade OKhK-501, low-pressure polyethylene grade ND and Alkathene D-2 in samples of 120 x 140 mm, 1 to 3 mm thick. The tests were made between flat polished electrodes 25 mm diameter with rounded edges, one electrode being spring-loaded to 100 g/cm². The electrode assembly with sample, contained in a bakelite cylinder, was placed in the heated bath and one electrode was earthed. In all the tests the voltage was raised to breakdown in 30 to 60 sec; the number of breakdown tests on each material of given thickness or type of wire was from 10 to 30 at each given temperature. Electric strength test results on automobile cable with polyvinyl chloride insulation are plotted in Card 2/4

S/110/60/000/008/001/008
E194/E455

The Temperature-Dependence of the Electric Strength of Polyvinyl Chloride and Polyethylene Insulation

Fig.2 and the breakdown voltages for samples with external diameters of 3 mm, 5 mm and 7 mm are 18, 32 and 40 kV respectively. The breakdown voltage does not drop by more than 15% over the range 20 to 90°C but thereafter commences to drop sharply, and at 120°C the corresponding values are 16, 23 and 28 kV. The polyvinyl chloride insulation commences to soften at a temperature of 90°C. An electric strength curve for all three wires is given in Fig.3 and it will be seen that up to 90°C the electric strength is slightly more than 40 kV/mm and then falls off. Test results for cable with polyethylene insulation of grade OKhK-501 are plotted in Fig.4. The electric strength ranges from 63 to 69 kV/mm at 20°C and is fairly constant to 70°C. It drops to 47 to 59 kV/mm at 90°C, at which temperature the material softens. Very similar results were obtained with Alkathene grade D-2, as indicated by the graph of Fig.5. The electric strength is 63 to 70 kV/mm at 20°C and falls to 51 to 56 kV/mm at 90°C; again the material softens at 70°C. Test results for sheets of polyvinyl chloride grades R230, R489 and R2566 are plotted in Card 3/4

S/110/60/000/008/001/008
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The Temperature-Dependence of the Electric Strength of Polyvinyl Chloride and Polyethylene Insulation

Fig.6, 7 and 8. The behaviour was similar to that of the cable. The least sensitive to temperature are grades R-230 and R-2566, whose electric strength is 34 to 47 kV/mm at 20°C and 23 to 29 kV/mm at 120°C. Polyethylene sheets behaved in much the same way as polyethylene cable; the test results are given in Fig.9. The low-pressure polyethylene grade ND had the highest electric strength, ranging from 93 kV/mm at 20°C to 63 kV/mm at 90°C. All the grades of polyethylene softened appreciably above 70°C. There are 9 figures. ✓

SUBMITTED: June 19, 1959

Card 4/4

1ST AND 2ND PARTS		3RD AND 4TH PARTS	
CHERNUSHKINA, I.		PROCESSES AND PROPERTIES INDEX	
27			
Experimental purification of spent soap lye with ferruginous wastes from making nickel catalysts. S. Rogoyavlenskii and T. Chernushkina. <i>Mashinostroenie-Zhurnal</i> 1960, No. 8/8, 80(1040). --A sludge from recovering Ni catalyst from hydrogenated fats has some advantages over Al_2O_3 for treating spent soap lye. The sludge contains water 64.6, insol. residue 14.67, fat 10.64, Fe^{++} 8.1 and Ni^{++} 2.19%. It is first treated with 4 parts concd. H_2SO_4 to 1 part dry sludge, and thinned with water to a liquid consistency. The insol. residue is removed, being inert. The amt. of raw sludge taken for use is 2% of the spent lye to be purified. After thorough mixing the lye is heated, then filtered and evapd. in vacuum. The spent lye must be slightly acidified before treatment. Julian P. Smith			
ASB-55A METALLURGICAL LITERATURE CLASSIFICATION			
1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800 2900 3000 3100 3200 3300 3400 3500 3600 3700 3800 3900 4000 4100 4200 4300 4400 4500 4600 4700 4800 4900 5000 5100 5200 5300 5400 5500 5600 5700 5800 5900 6000 6100 6200 6300 6400 6500 6600 6700 6800 6900 7000 7100 7200 7300 7400 7500 7600 7700 7800 7900 8000 8100 8200 8300 8400 8500 8600 8700 8800 8900 9000 9100 9200 9300 9400 9500 9600 9700 9800 9900		1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800 2900 3000 3100 3200 3300 3400 3500 3600 3700 3800 3900 4000 4100 4200 4300 4400 4500 4600 4700 4800 4900 5000 5100 5200 5300 5400 5500 5600 5700 5800 5900 6000 6100 6200 6300 6400 6500 6600 6700 6800 6900 7000 7100 7200 7300 7400 7500 7600 7700 7800 7900 8000 8100 8200 8300 8400 8500 8600 8700 8800 8900 9000 9100 9200 9300 9400 9500 9600 9700 9800 9900	

BURLAK, V.F., inzh.; CHERNUSHKO, Ye.P., inzh.

Andesite-basalt paste for protecting the brick lining of gas producers. Masl.-zhir. prom. 27 no.9:38-39 S '61. (MIRA 14:11)

1. Ussuriyskiy maslozhirovoy kombinat.
(Gas producers) (Protective coatings)

TUKHACHEVSKIY, Mikhail Nikolayevich[deceased]; OS'KIN, G.I.,
kand. ist. nauk, polkovnik; CHERNUSHKOV, P.P., kand.
ist. nauk, polkovnik zapasa; SOLOV'YEV, N.I., red.

[Selected works] Izbrannye proizvedeniia [v dvukh to-
makh]. Moskva, Voenizdat, 1964. 2 v. (MIRA 17:9)

KOROVYAKOVSKIY, I.G., inzh.; CHERNUSSKIY, A.I., inzh.; BARTALOG, A.F., inzh.;
SHCHAVLINSKIY, V.A., inzh.; RYZHIK, V.M., inzh.

RIND-150 type separators with two reversible columns. Energ. i
elektrotekh. prom. no.3:21-23 J1-S '64.

(MIRA 17:11)

I 62090-65 EW(1)

ACCESSION NR: AP5016738

UR/0286/65/000/010/0049,0019

AUTHORS: Nazarchuk, V. Ya.; Rokitskiy, Ye. I.; Chernvyavskiy, Yu. M. 14
B

TITLE: Device for automatically determining the Curie point of ferrites. Class 21, No. 171047 21

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 10, 1965, 49

TOPIC TAGS: ferrite, Curie point

ABSTRACT: This Author Certificate presents a device for automatically determining the Curie point of ferrites. It contains an electric oven with an impeller for agitating the air and an electronic potentiometer. To determine the Curie point for several specimens simultaneously, the electronic potentiometer is provided with electric rings (see fig. 1 on the Enclosure). The specimens are heated to the Curie point from heating by radiant energy. The specimens are placed in the center of the frequency transformers built into the holes of the ceramic rings. The device has: 1 diagram.

ASSOCIATION: none

SUBMITTED: 10Aug63

ENCL: 01

SUB CODE: EC

NO REF SOV: 000

OTHER: 000

Card 1/2

L 62090-65

ACCESSION NR: AP5016738

ENCLOSURE: 01

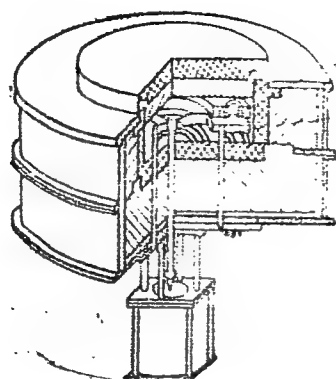


Fig. 1.

1- solid ceramic ring; 2- ceramic ring with holes

Card ¹²2/2

ANDREYEV, A.S.; NOVIKOV, A.N.; CHERNY, F.

Determination of calcium and magnesium in nickel and nickel
alloys. Trudy LPI no.201:46-50 '59. (MIRA 13:3)
(Calcium--Analysis) (Magnesium--Analysis)

BAYMAKOV, Yu.V.; KAMENETSKIY, M.V.; CHERNY, F.

Equilibrium between titanium chlorides and titanium metal in
molten potassium and sodium chlorides. Izv.vys.ucheb.zav.; tsvet.
met. 3 no.2:102-107 '60. (MIRA 15:4)

1. Leningradskiy politekhnicheskii institut, kafedra elektropiro-
metallurgii.

(Titanium--Electrometallurgy)

CHERNY, G. G. (Moscow)

"Hypersonic flow of inviscid gas past bodies".

report presented at the 2nd All-Union Congress on Theoretical and Applied Mechanics, Moscow, 29 January - 5 February 1964.

KNOR, Z.; PONETS, V.[Ponec, V.]; CHERNY, S.[Cerny, S.]

Interaction between hydrogen and oxygen on evaporated
palladium films. Kin. i kat. 4 no.3:437-442 My-Je '63.
(MIRA 16:7)

1. Institut fizicheskoy khimii AN Chekhoslovatskoy Sotsialisti-
cheskoy Respubliki, Praga.
(Hydrogen) (Oxygen) (Palladium)

CHERNYA, N.D.

SOV-91-58-9-5/29

AUTHORS: Gleb, A.Ya. and Chernya, N.D. Engineers

TITLE: Centralizing the Control of Fuel Feeding Mechanisms (Tsen-
tralizatsiya upravleniya mekhanizmami toplivopodachi)

PERIODICAL: Energetik, 1958, Nr 9, pp 12-15 (USSR)

ABSTRACT: The "Estenergo" Thermal Electric Plant's fuel feed system, used to transport fuel from the unloading bunkers along the conveyor belts to the boilers, was previously controlled manually and necessitated the presence of a large number of service personnel. In 1956, the plant began to centralize the control of the fuel transporting mechanisms. The authors describes the various methods by which this was achieved. By replacing and renewing some of the existing equipment, adopting a block lay-out and concentrating all the controls together on one central panel, the fuel feed was made almost completely automatic. The whole process could be controlled by 1-2 persons from the central switch board. There are 4 schematic diagrams, 1 diagram and 1 figure.

1. Fuels--Handling 2. Fuels--Control systems 3. Feed mechanisms
--Effectiveness 4. Boilers--Equipment

Card 1/1

L 57534-65 EWT(d)/EWT(m)/EWP(i)/EWP(a)/EWA(d)/EWP(v)/T/EWP(t)/EWP(k)/EWP(h)/
EWP(b)/EWP(l)/EWA(h) Pf-h/Peb JD
ACCESSION NR: AR5015175 UR/0137/65/000/005/D014/D01-

SOURCE: Ref. zh. Metallurgiya, Abs. 5D88

AUTHOR: Martynov, V. D.; Ignatenko, N. N.; Shadchinev, V. A.; Cherepakhin, A. N.;
Chernya, N. N.; Monakhov, V. N.

TITLE: Automatic ultrasonic production line for cleaning grease from rolled
metal rods with a diameter from 10 to 70 mm

CITED SOURCE: Sb. Primeneniye ul'trazvuka v s.-kh. mashinostr. Rostov-na-Donu,
Rostovsk. un-t, 1964, 109-120

TOPIC TAGS: ultrasonics, ultrasonic cleaning, cleaning, grease, metal rod

TRANSLATION: The article describes an experiment carried out in the
Rostsel'mash plant on ultrasonic cleaning of grease from rolled rod. Several
different methods of cleaning are presented and recommendations are given as to a
choice of the most efficient cleaning methods applying chemical and ultrasonic
means. A. Leont'yev.

SUB CODE: MM, IE

EXCL: 00

Card 1/1

TEPINKICHIYEV, V.K., prof., otv. red.; MARTYNOV, V.D., dots., red.;
CHERNYA, N.N., st. inzh., red.; KONAKHOV, V.N., st. inzh.,
red.; SHADCHINEV, V.A., ispol. obyazan. dots., red.;
BABIKOV, V.V., red.

[Use of ultrasonic waves in agricultural machinery manu-
facture] Primenenie ul'trazvuka v sel'skokhoziaistvennom
mashinostroenii. Rostov-na-Donu, Izd-vo Rostovskogo univ.,
1964. 157 p. (MIRA 18:3)

1. Rostov-on-Don. Institut sel'skokhozyaystvennogo mashi-
nostroyeniya.

ZEDGENIDZE, G.A.; CHERKASOV, V.F.; FILATOV, P.P.; YELASHOV, Yu.G.;
CHERNYACHOVSKAYA, A.K.; SAYENKO, S.F.

Scientific research on radiobiology, clinical radiology and
roentgenology conducted in the institutes of the Academy of
Medical Sciences of the U.S.S.R. in 1964. Vest. AMN SSSR
20 no.9:3-10 '65. (MIRA 28:11)

1. Institut meditsinskoy radiologii AMN SSSR, Obninsk.

CHERNYADEV, A.

Automatic grain cleaning and drying unit. Tekh.v sel'khoz. 21
no.8:23-28 Ag '61. (MIRA 14:7)

1. Kirovskiy sel'skokhozyaystvennyy institut.
(Grain—Cleaning) (Grain—Drying)

CHERNYADIN, A., Eng.

Steam

Using exhaust from steam engines in raising livestock. Kolkh. proizv. No. 3, 1953.

Monthly List of Russian Accessions, Library of Congress
June 1953. UNCL.

CHEERNYADEV, A. N.

N/5
735.921
.C5

Teplofikatsiya kolkhozov (Generation of electricity at the central heating plant of kolkhozes) Kirov, KirovskoyeKnizhnoye Izd-vo, 1954.
98p. diagrs., tables.
"Literatura": p. (100)

CHERNYADYEV, A., inzhener.

Farm heating plant without distributing mains. Sel'.stroil.11
no.5:19-20 My '56. (MIRA 9:9)

1.Kirovskiy filial Severo-zapadnogo proyektного instituta.
(Waste heat) (Feeding and feeding stuffs)

Chernyadev, Adrian Nikolayevich

CHERNYADEV, Adrian Nikolayevich; LETNEV, B.Ya., red.; SOKOLOVA, N.N., tekhn.red.

[Generation of electricity at central heating plants for agricultural
uses] Opyt teplofikatsii sel'skogo khoziaistva. Moskva, Gos.izd-vo
sel'khoz.lit-ry, 1957. 183 p. (MIRA 11:1)
(Electric power plants) (Heating from central stations)